

# 1 Introduction

## 1.1 Purpose of this Document

The California Endangered Species Act (CESA) prohibits the import, export, take, possession, purchase or sale of species listed by the State as endangered, threatened or in specific cases candidate species (California Fish and Game Code [Fish & Game Code] § 2080, 2081.1). Section 86 of the Fish & Game Code defines *take* as to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” As provided by Section 2081(b) of the Fish & Game Code, the California Department of Fish and Wildlife (CDFW) may authorize take that is otherwise prohibited by Section 2080 with an incidental take permit (ITP). The requirements for an application for an ITP under CESA are described in the California Code of Regulations (CCR) (14 CCR 783.2). CDFW must make findings based on its administrative record that the following conditions are met before issuing an ITP:

- The take authorized will be incidental to an otherwise lawful activity.
- The applicant will minimize and fully mitigate the impacts of the take authorized.
- The measures required to meet the permit obligations will be roughly proportional in extent to the impact of the authorized taking on the species. Where various measures are available to meet this obligation, the measures required will maintain the applicant’s objectives to the greatest extent possible. All required measures will be capable of successful implementation.
- The permit will be consistent with any regulations adopted pursuant to Fish & Game Code Sections 2112 and 2114.
- The applicant has ensured adequate funding to implement the measures required under the permit to minimize and fully mitigate the impacts of the taking, and to monitor compliance with, and the effectiveness of, the measures.
- The issuance of the permit will not jeopardize the continued existence of the species.

Pursuant to the provisions of the California Native Plant Protection Act (Fish & Game Code § 1908), incidental take of protected plants may also be authorized, as described in 14 CCR § 786.9. *Take of Rare Plants*.

This document presents, in accordance with 14 CCR § 783.2. *Incidental Take Permit Applications* and 14 CCR § 786.9. *Take of Rare Plants*, an application for authorization of incidental take associated with future operation of the State Water Project with the addition of the project referred to as California WaterFix, which includes construction of certain proposed water conveyance facilities within the Sacramento-San Joaquin River Delta, along with operation of the State Water Project (SWP) subsequent to and incorporating the newly constructed facilities. Table 1-1 identifies where in this document the application materials prescribed by 14 CCR § 783.2(a) are found. This chapter additionally provides certain other materials not required by 14 CCR § 783.2:

- A brief overview description of the proposed project (Section 1.3).
- A rationale for the duration of the requested permit (Section 1.5).
- Identification of the lead agency for purposes of the California Environmental Quality Act (CEQA) (Section 1.6).

**Table 1-1. Location in this document of required application materials**

<b>Code Citation</b>	<b>Requirement</b>	<b>Location</b>
14 CCR § 783.2(a)(1)	Applicant's full name, mailing address, and telephone number(s).	Chapter 1, Section 1.2
14 CCR § 783.2(a)(2)	The common and scientific names of the species to be covered by the permit and the species' status under CESA.	Chapter 2, Table 2-1
14 CCR § 783.2(a)(3)	A complete description of the project or activity for which the permit is sought.	Chapter 3
14 CCR § 783.2(a)(4)	The location where the project or activity is to occur or to be conducted.	Chapter 1, Section 1.4
14 CCR § 783.2(a)(5)	An analysis of whether and to what extent the project or activity for which the permit is sought could result in the taking of species to be covered by the permit.	Chapter 4
14 CCR § 783.2(a)(6)	An analysis of the impacts of the proposed taking on the species.	Chapter 4
14 CCR § 783.2(a)(7)	An analysis of whether issuance of the incidental take permit would jeopardize the continued existence of a species.	Chapter 4
14 CCR § 783.2(a)(8)	Proposed measures to minimize and fully mitigate the impacts of the proposed taking.	Chapter 5
14 CCR § 783.2(a)(9)	A proposed plan to monitor compliance with the minimization and mitigation measures and the effectiveness of the measures.	Chapter 6
14 CCR § 783.2(a)(10)	A description of the funding source and the level of funding available for implementation of the minimization and mitigation measures.	Chapter 7
14 CCR § 783.2(a)(11)	Certification.	Chapter 8

## 1.2 Applicant

The permit applicant is the California Department of Water Resources (DWR) located at 1416 Ninth Street, Room 1115-1, Sacramento, CA 95814. The responsible agent is Mark Cowin, Director, at (916) 653-7007. Mark Cowin or his designee has authority to accept service of process.

## 1.3 Brief Description of the Proposed Project

The following is a brief description of the Proposed Project. A complete description of the Proposed Project is found in Chapter 3.

DWR proposes to construct state-of-the-art intakes and underground conveyance tunnels that will enable the facilities of the SWP in the Sacramento-San Joaquin River Delta (Delta) to continue to perform its mission in the face of 21st-century stressors from flooding, sea level rise,

and the risk of seismic events. Implementation of the Proposed Project will cover CESA compliance for water operations of both new and existing water conveyance facilities in the SWP, including coordinated operations with the US Bureau of Reclamation through the joint Central Valley Project (CVP)/SWP facilities in the Delta. The Proposed Project will enable joint management of north and south Delta water diversions, called dual conveyance. The dual conveyance facilities will be operated to minimize impacts to threatened and endangered and other native fish and to maintain and stabilize the water supply.

The state will build new water conveyance facilities to divert water from the Sacramento River through three intakes on the east bank of the Sacramento River between Clarksburg and Courtland. The three intakes will be spaced about 1 mile apart to minimize their impacts on migratory native fish. Each intake will be screened with a state-of-the-art fish screen that must ensure high survival (at least 95 percent) of covered fish species as they pass. Water will travel from the three intakes, each with a 3,000 cubic feet per second (cfs) capacity, to a sedimentation basin before reaching the tunnels. From the intakes, water will flow into one of two initial single-bore tunnels (one is 9 miles long with a diameter of 28 feet and 40 feet; the other is 5 miles long with a diameter of 28 feet), which will lead to an intermediate forebay on Glannvale Tract. From the southern end of this forebay, water will pass through an outlet structure into a 30-mile, 40-foot-diameter dual-bore tunnel where it will flow by gravity to the south Delta. Water will then reach two new pumping plants northeast of the Clifton Court Forebay, where it will be pumped from the tunnels into the north cell of the expanded Clifton Court Forebay. The forebay will be dredged and redesigned to provide an area isolating water flowing from the new north Delta facilities from water diverted from south Delta channels.

The tunnels will be constructed approximately 120 feet below the surface using up to ten tunnel boring machines that will operate nearly simultaneously throughout the roughly 9-year construction period of the tunnels. Much of the construction activity will occur underground. Four sites along the tunnel alignment will be used to launch the tunnel boring machines: the east side of Sacramento River south of Clarksburg, Glannvale Tract, Bouldin Island, and adjacent to Clifton Court Forebay. These same sites will also be used as staging areas and to store the material excavated from the tunnels. The total construction period will be approximately 13 years, from 2018 to 2031.

The Proposed Project also includes construction of a new operable barrier at the confluence of the San Joaquin River and Old River. This new facility will be called the *head of Old River gate* (HOR gate). The purpose of the HOR gate is to keep outmigrating San Joaquin River fall-run Chinook from moving into the south Delta via Old River, and to improve water quality in the San Joaquin River (particularly the Stockton Deep Water Ship Channel) in the fall.

Once the new north Delta facilities are operational, dual conveyance operations will replace the current operations implemented in compliance with the requirements of the biological opinions issued by U.S. Fish and Wildlife Service (USFWS) in 2008 and National Marine Fisheries Service (NMFS) in 2009, and Incidental Take Permit (No. 2081-2009-001-03) issued to DWR by CDFW in 2009 for take of longfin smelt. The Proposed Project also includes new operational criteria for outflow in the spring. The north Delta diversions and the head of Old River gate are new facilities for the SWP and will be operated consistent with new proposed operating criteria that minimize adverse effects on native fish. The existing south Delta facilities will be operated

to new criteria, which are protective of listed fish species. Besides these specific changes, the operating criteria of the new dual conveyance system incorporate all other criteria included in the existing Incidental Take Permit (CDFG 2009), USFWS and NMFS biological opinions (USFWS 2008; NMFS 2009, 2011), Consistency Determinations (CDFG 2011, 2012), and applicable State Water Resources Control Board order to the SWP (D-1641). The existing criteria that would continue under dual operations include minimum standards for fall outflow (Fall X2) and the ratio of water exports to inflow (E:I ratio), among others. Many operational criteria vary depending on the type of water condition in a particular winter. For example, pumping from the north Delta would be greatest in the wettest water conditions but would be zero in critical water seasons that typically occur 15 percent of the time. In summary, the Proposed Project incorporates modified or new operations of five components as compared to current operations of the SWP/CVP in the Delta:

- New operations of the north Delta facilities to ensure sufficient flows in the Sacramento River to support migration by covered fish species and to ensure no change in the frequency or intensity of reverse flows (called *North Delta bypass flows*).
- New operations of the head of Old River gate.
- Modified spring Delta outflow to ensure no adverse effects to longfin smelt.
- South Delta export operations modified to account for dual conveyance and be more protective of covered fish species.
- New Rio Vista minimum flow requirement during January through August.

The Proposed Project has the potential to result in incidental take of a number of species listed under CESA. Incidental take and the impacts associated with that take on CESA-listed fish and wildlife from construction and operation of the Proposed Project will be avoided, minimized, and fully mitigated. Numerous elements of project design as well as measures to be implemented during construction and operations ensure avoidance or minimization of impacts. Mitigation will primarily be achieved by restoring and protecting, in perpetuity, substantial parcels of suitable habitat for the affected species.

#### **1.4 Relationship to Existing Incidental Take Permit and Biological Opinions**

There are currently numerous regulatory constraints in place that apply to the Proposed Project. Many of the existing constraints that have been put in place as a result of an Incidental Take Permit (California Department of Fish and Game [CDFG] 2009) and past BiOps (NMFS 2009, 2011; USFWS 2008) that received FGC Section 2080.1 consistency determinations under CESA. Table 1-2 identifies the existing requirements that apply to SWP/CVP facilities in the Delta region and notes which requirements are incorporated in the Proposed Project.

**Table 1-2. SWP Facilities and Activities Included and Not Included in the Proposed Project**

Topic	Action	Description	Source	Comments
<b>Facilities and Activities Included in the Proposed Project</b>				
New Facilities	Conveyance facilities construction	Construction, operations, and maintenance of the proposed north Delta intakes and associated conveyance facilities.	This document	
New Facilities	Head of Old River Gate construction	Construction, operations, and maintenance of the proposed head of Old River operable gate.	This document	
Real-time Operations	Real-time Decision-making	Apply real-time decision-making to assist fishery management; 2081 application specifies structure: SWG, DOSS, WOMT.	Reclamation (2008) USFWS (2008) DWR (2009), NMFS (2009)	Changes needed to incorporate operations of new facilities and corresponding changes in management structure.
Real-time Operations	NMFS IV.3	Reduce likelihood of entrainment or salvage at the export facilities	NMFS (2009)	Proposed Project operational criteria supplement this RPA.
Real-time Operations	USFWS RPA General	Smelt Working Group and Water and Operations Management Team	USFWS (2008)	WOMT coordinates with and provides recommendations to the RTO Team for the Delta operations.
Real-Time Operations	NMFS 11.2.1.1	Technical Team	NMFS (2009)	The technical groups are incorporated into the Proposed Project unchanged. WOMT coordinates with and provides recommendations to the RTO Team for the Delta operations. All other technical groups (SRTTG, SWG, DOSS etc.) are incorporated into the Proposed Project with revised responsibilities to address the operations of the new facilities.
Real-time Operations	NMFS IV.5	Formation of Delta Operations for Salmon and Sturgeon Technical Working Group	NMFS (2009)	These technical groups are incorporated in the Proposed Project unchanged.
Barriers	Temporary Barriers	Operation of the temporary barriers project in the south Delta	Reclamation (2008)	Temporary barriers are included with regard to hydrodynamic effects, with year-to-year placement and removal subject to separate authorizations. HORB replaced by operable HOR gate.
Barriers	Do not implement Permanent Barriers	South Delta Improvement Program—Phase I (Permanent Operable Gates)	USFWS (2008), NMFS (2009)	South Delta Improvement Program is not being implemented. The HOR gate is included in the Proposed Project.

<b>Topic</b>	<b>Action</b>	<b>Description</b>	<b>Source</b>	<b>Comments</b>
Barriers	DO in Stockton Deep-Water Ship Channel	Operate HORB to improve DO in the Stockton Deep-Water Ship Channel	Reclamation (2008)	Existing aeration facility in the Stockton Deep-Water Ship Channel is not included in the Proposed Project.
Flow	CDFW Condition 5	Flow criteria, also including real-time operational considerations	CDFG (2009)	Proposed Project operational criteria supersede this condition.
Flow	Jones Pumping Plant	Permitted diversion capacity of 4,600 cfs	Reclamation (2008) USFWS (2008) NMFS (2009)	To be operated per flow criteria.
Flow	Banks Pumping Plant	Diversion rate normally restricted to 6,680 cfs, with exceptions	Reclamation (2008) USFWS (2008) DWR (2009) NMFS (2009)	To be operated per flow criteria.
Flow	NMFS IV.2.1	San Joaquin River inflow to export ratio (and 61-day pulse flows)	NMFS (2009)	Modeling criteria of Proposed Project uses this as mechanism to meet spring outflow criteria in April and May. Proposed Project operational criteria for south Delta operations supersede this RPA action; Proposed Project operational criteria include this I:E ratio for April and May only. See Table 3.3-1.
Flow	NMFS IV.2.3	OMR flow management	NMFS (2009)	Proposed Project operational criteria incorporate and replace this RPA action. See Table 3.3-1.
Flow	USFWS 1	Adult migration and entrainment; first flush: limit exports so average daily OMF flow is no more negative than -2,000 cfs for 14 days, with a 5-day running average no more negative than -2,500 cfs	USFWS (2008)	Proposed Project operational criteria incorporate and replace this RPA action. See Table 3.3-1.
Flow	USFWS 2	Adult migration and entrainment	USFWS (2008)	Proposed Project operational criteria incorporate and replace this RPA action.
Flow	USFWS 3	Entrainment protection of larval smelt	USFWS (2008)	Proposed Project operational criteria incorporate and replace this RPA action.
Flow	USFWS 4	Estuarine habitat during fall (provide Delta outflow to maintain average X2 for September, October, and November)	USFWS (2008)	

<b>Topic</b>	<b>Action</b>	<b>Description</b>	<b>Source</b>	<b>Comments</b>
North Bay Aqueduct	North Bay Aqueduct Monitoring	Conduct monitoring at NBA	Reclamation (2008)	Monitoring would continue.
North Bay Aqueduct	North Bay Aqueduct Operations	Operate NBA	USFWS (2008) CDFG (2009)	No change from 2008/2009 operational constraints.
Delta Cross Channel	Delta Cross Channel Operations	Operate Delta Cross Channel	Reclamation (2008) NMFS (2009)	NMFS IV.1.2 operational criteria is assumed in the modeling with no change. NMFS IV.1.1 is addressed by real-time operations. As described in Section 3.4.8, <i>Monitoring and Research Program</i> , the monitoring associated with current operations would continue.
Interior Delta Entry	Engineering solutions to reduce interior Delta entry	Reduce interior Delta entry	Reclamation (2008) NMFS (2009)	NMFS IV.1.3 is addressed in Proposed Project by Georgiana Slough non-physical barrier and HOR gate.
Tracy and Skinner Facilities	CDFW Condition 6.2	Skinner facility operations	CDFG (2009)	No change from 2009 operational constraints.
Tracy and Skinner Facilities	CDFW Condition 6.3	Skinner facility salvage operations	CDFG (2009)	No change from 2009 operational constraints.
Suisun Marsh Facilities	Suisun Marsh Salinity Control Gates	Operate Suisun Marsh salinity control gates, as described	Reclamation (2008) DWR (2009)	No change from 2009 operational constraints.
Suisun Marsh Facilities	Roaring River Distribution System	Operations	Reclamation (2008) NMFS (2009) DWR (2009)	No change from 2009 operational constraints.
Suisun Marsh Facilities	Morrow Island Distribution System	Operations	Reclamation (2008) NMFS (2009) DWR (2009)	No change from 2009 operational constraints.
Suisun Marsh Facilities	Goodyear Slough Outfall	Operations	Reclamation (2008) NMFS (2009) DWR (2009)	No change from 2009 operational constraints.
Studies	NMFS 11.2.1.2	Research and adaptive management	NMFS (2009)	California WaterFix proposes new program.

Topic	Action	Description	Source	Comments
Studies	NMFS 11.2.1.3	Monitoring programs and reporting regarding effects of CVP/SWP operations	NMFS (2009)	This work is performed by IEP with take authorization via scientific collection permits. This would continue and include any additional monitoring and reporting as required under the PP.
Studies	CDFW Condition 8	Monitoring and reporting	CDFG (2009)	No change from 2009 activities.
Other Facilities	CCWD Facilities	Operation and maintenance of CCWD facilities owned by Reclamation: the Rock Slough Intake and Contra Costa Canal	Reclamation (2008)	Rock Slough diversion is included in modeling/baseline.
Other Facilities	Clifton Court Forebay Aquatic Weed Control Program	Application of herbicide to control aquatic weeds and algal blooms in CCF	Reclamation (2008) DWR (2009)	
<b>Facilities and Activities Not Included in the Proposed Project</b>				
Existing Requirements	D-1641	Implement D-1641, as described	SWRCB D-1641	Incorporated into the environmental baseline. Proposed Project may include discretionary operations as allowed under the existing regulatory criteria and proposed operations criteria.
Existing Requirements	COA	Implement existing COA	P.L. 99-546	Incorporated into the environmental baseline. Proposed Project may include discretionary operations as allowed under the existing regulatory criteria and proposed operations criteria.
Existing Requirements	CVPIA	Implement CVPIA, as authorized	P.L. 102-575	Incorporated into the environmental baseline. Proposed Project may include discretionary operations as allowed under the existing regulatory criteria and proposed operations criteria.
Existing Requirements	SWRCB WRO 90-05	Implement WRO 90-05	SWRCB WRO 90-05	Incorporated into the environmental baseline.
Flow	VAMP	Vernalis Adaptive Management Plan (VAMP)	D-1641 Reclamation (2008)	VAMP has expired, per agreement.
North Bay Aqueduct	CDFW Condition 6.4	NBA, RRDS, and Sherman Island diversions and fish screens	CDFG (2009)	Will be complete prior to start of Proposed Project.
Tracy and Skinner Facilities	NMFS IV.4.1	Tracy fish collection facility improvements to reduce pre-screen loss and improve screening efficiency	NMFS (2009)	Will be completed before north Delta diversion operations begin; subject to a separate take authorization.

<b>Topic</b>	<b>Action</b>	<b>Description</b>	<b>Source</b>	<b>Comments</b>
Tracy and Skinner Facilities	NMFS IV.4.2	Skinner fish collection facility improvements to reduce pre-screen loss and improve screening efficiency	NMFS (2009)	Will be completed before north Delta diversion operations begin; subject to a separate take authorization.
Tracy and Skinner Facilities	NMFS IV.4.3	Tracy fish collection facility and the Skinner fish collection facility actions to improve salvage monitoring, reporting, and release survival rates	NMFS (2009)	Will be completed before north Delta diversion operations begin; subject to a separate take authorization.
Studies	NMFS IV.2.2	Six-year acoustic tag experiment	NMFS (2009)	Completed.
Habitat Restoration	NMFS I.5	Funding for CVPIA Anadromous Fish Screen Program	NMFS (2009)	
Habitat Restoration	NMFS I.6.1	Restoration of floodplain rearing habitat	NMFS (2009)	Occurs in Yolo Bypass; subject to separate take authorization.
Habitat Restoration	NMFS I.6.2	Near-term actions at Liberty Island/Lower Cache Slough and Lower Yolo Bypass	NMFS (2009)	Actions already under way and will have separate take authorization.
Habitat Restoration	NMFS I.6.3	Lower Putah Creek enhancements	NMFS (2009)	Actions already under way and will have separate take authorization.
Habitat Restoration	NMFS I.6.4	Lisbon Weir improvements	NMFS (2009)	Actions already under way and will have separate take authorization.
Habitat Restoration	NMFS I.7	Reduce migratory delays and loss of salmon, steelhead, and sturgeon at Fremont Weir and other structures in the Yolo Bypass	NMFS (2009)	Occurs in Yolo Bypass; subject to separate take authorization.
Habitat Restoration	USFWS 6	Habitat restoration (create or restore a minimum of 8,000 acres of intertidal and associated subtidal habitat in the Delta and Suisun Marsh)	USFWS (2008)	Action is being implemented and is expected to be completed before north Delta diversion operations begin.
Habitat Restoration	CDFW Condition 7	LFS habitat restoration	CDFG (2009)	Action is being implemented and may be included in the USFWS 6 requirement above. Action is expected to be completed before north Delta diversion operations begin.
Studies	CDFW Condition 6.1	MIDS study of entrainment effects	CDFG (2009)	Study is underway and will complete prior to initiation of Proposed Project.
Other Facilities	CCWD Alternative Intake	Construction of alternative intake at Rock Slough	Reclamation (2008)	Operates under existing BiOps, incorporated into the environmental baseline.

Topic	Action	Description	Source	Comments
<p>BiOp = biological opinion                      CCWD = Contra Costa Water District                      CDFG = California Department of Fish and Game                      CDFW = California Department of Fish and Wildlife                      cfs = cubic feet per second                      COA = Coordinated Operations Agreement                      CVP = Central Valley Project                      CVPIA = Central Valley Project Improvement Act                      D-1641 = State Water Resources Control Board D-1641                      DO = Dissolved oxygen                      DOSS = Delta Operations Salmonid and Sturgeon                      DWR = California Department of Water Resources                      HOR = head of Old River                      HORB = head of Old River barrier                      I:E = Import to export                      LFS = Longfin smelt                      MIDS = Morrow Island Distribution System                      NBA = North Bay Aqueduct                      NMFS = National Marine Fisheries Service                      OMR = Old and Middle Rivers                      P.L. = Public Law                      Reclamation = Bureau of Reclamation                      RPA = Reasonable and Prudent Alternative                      RRDS = Roaring River Distribution System                      RTO = Real-Time Operations                      SRTTG = Sacramento River Temperature Task Group                      SWG = Smelt Working Group                      SWP = State Water Project                      SWRCB = State Water Resources Control Board                      USFWS = U.S. Fish and Wildlife Service                      VAMP = Vernalis Adaptive Management Plan                      WOMT = Water and Operations Management Team                      WRO = Water Right Order</p>				

## 1.5 Project Location

The Proposed Project includes all State Water Project facilities in the Sacramento River basin or within the Sacramento-San Joaquin Delta and Suisun Marsh (Figure 1-1). A detailed map of the Proposed Project facilities in the Delta appears in the mapbook, Appendix 3.A, which delineates the footprint of existing and proposed facilities and also shows the area of potential indirect effects (noise, activity, light, dust, etc.; see Chapter 4, Effects Analysis, for a detailed discussion), where applicable.

The Proposed Project (Figure 1-1) components are found in the following locations:

- The Suisun Marsh Salinity Control Gates, Roaring River Distribution System (RRDS), Morrow Island Distribution System (MIDS), and Goodyear Slough Outfall, existing facilities in Suisun Marsh.
- The Barker Slough intakes to the North Bay Aqueduct, an existing facility in the north-central Delta.
- The three north Delta intakes, new facilities that are proposed to be constructed along the Sacramento River between Clarksburg and Courtland and operated for the duration of the permit.
- The conveyance facilities, new facilities that are proposed to be constructed to convey waters from the north Delta intakes to the Clifton Court Forebay.
- The Clifton Court Forebay, an existing facility in the south Delta that would be expanded and modified structurally to incorporate new pump stations serving the new tunnels.
- The John E. Skinner Fish Facility and Harvey O. Banks Pumping Plant (collectively referred to as the Banks Pumping Plant Complex), existing water export facilities south of Clifton Court Forebay.
- Temporary and permanent new supplemental facilities to enable construction and operation of the facilities listed above. These include access roads, staging areas, temporary and permanent power lines, a concrete batch plant, several barge landing areas, locations for the launch and retrieval of tunnel boring machines, and locations for storing material excavated from the tunnels pending its reuse.
- The head of Old River gate (HOR gate), a proposed facility that would be installed at the site of the head of Old River temporary barrier and which, upon completion, would replace that temporary barrier.
- Locations for the construction and maintenance of the covered species mitigation described in Chapter 5 of this document, along with temporary staging areas and access routes that may be needed to create and maintain these areas. These locations will be located within the legal Delta or nearby, in the Byron Hills.

## 1.6 Requested Permit Duration

DWR proposes to construct the North Delta intakes over a 13-year period, likely beginning in 2018. DWR is requesting the permit to be for a 33-year interval, subject to a change in conditions. The 33-year permit term is necessary to provide sufficient time to test and refine project operations using the collaborative science, monitoring, and adaptive management program included in the Proposed Project (described in Chapter 6). This program will help to resolve considerable scientific uncertainty regarding the Delta ecosystem, including the effects of CVP and SWP operations and the related operational criteria. This program will also inform and improve habitat restoration and other mitigation measures conducted under the biological opinions and 2081b permits (this permit and the existing 2081b permit for longfin smelt). Twenty years of project operations under this permit are necessary to fully realize the potential of this important program.

DWR is seeking permit coverage for operations of all existing and proposed SWP facilities in the Delta (named above in Section 1.4) from the time the proposed north Delta intakes become operational, through to the end of the permit term. Interim operations at existing facilities, i.e. operations until the time the proposed north Delta intakes become operational, will be covered through other authorizations.

## 1.7 CEQA Lead Agency

The CEQA lead agency is DWR. The contact information is the same as for the permit applicant. A Draft EIR/EIS was published on December 13, 2013 (U.S. Department of the Interior, Bureau of Reclamation; U.S. Fish and Wildlife Service; U.S. Department of Commerce; National Oceanic and Atmospheric Administration, National Marine Fisheries Service; and California Department of Water Resources 2013). The public comment period for the draft EIR/EIS closed on July 29, 2014. A Recirculated Draft EIR/Revised Draft EIS evaluating environmental impacts of the Proposed Project was published on July 9, 2015. The Final EIR/EIS for this project is pending.

## 1.8 References

- Bureau of Reclamation. 2008. *Biological Assessment on the Continued Long-term Operations of the Central Valley Project and the State Water Project*. Available: [http://www.usbr.gov/mp/cvo/ocap\\_page.html](http://www.usbr.gov/mp/cvo/ocap_page.html).
- California Department of Fish and Game. 2009. California Endangered Species Act Incidental Take Permit No. 2081-2009-001-03.
- California Department of Fish and Game. 2011. California Department of Fish and Game Consistency Determination, Fish and Game Code Section 2080.1, Tracking Number 2080-2011-022-00. Signed October 14, 2011.
- California Department of Fish and Game. 2012. California Department of Fish and Game Consistency Determination, Fish and Game Code Section 2080.1, Tracking Number 2080-2012-005-00. Signed April 27, 2012.
- California Department of Water Resources. 2009. California Incidental Take Permit Application for the California State Water Project Delta Facilities and Operations. February.
- National Marine Fisheries Service. 2009. *Biological Opinion and Conference Opinion on the Long-term Operations of the Central Valley Project and State Water Project*. June. Southwest Region, Long Beach, CA. Available: [http://www.westcoast.fisheries.noaa.gov/publications/Central\\_Valley/Water%20Operations/Operations,%20Criteria%20and%20Plan/nmfs\\_biological\\_and\\_conference\\_opinion\\_on\\_the\\_long-term\\_operations\\_of\\_the\\_cvp\\_and\\_swp.pdf](http://www.westcoast.fisheries.noaa.gov/publications/Central_Valley/Water%20Operations/Operations,%20Criteria%20and%20Plan/nmfs_biological_and_conference_opinion_on_the_long-term_operations_of_the_cvp_and_swp.pdf), accessed 2015.09.17.
- National Marine Fisheries Service. 2011. *2009 Reasonable and Prudent Alternative with 2011 Amendments*. April 7. Available: [http://www.westcoast.fisheries.noaa.gov/publications/Central\\_Valley/Water%20Operations/Operations,%20Criteria%20and%20Plan/040711\\_ocap\\_opinion\\_2011\\_amendments.pdf](http://www.westcoast.fisheries.noaa.gov/publications/Central_Valley/Water%20Operations/Operations,%20Criteria%20and%20Plan/040711_ocap_opinion_2011_amendments.pdf), accessed 2015.09.17.
- U.S. Department of the Interior, Bureau of Reclamation; U.S. Fish and Wildlife Service; U.S. Department of Commerce; National Oceanic and Atmospheric Administration, National Marine Fisheries Service; and California Department of Water Resources. 2013. *Draft Environmental Impact Report/Environmental Impact Statement, Bay Delta Conservation Plan*. Available: <http://baydeltaconservationplan.com/2013-2014PublicReview/2013PublicReviewDraftEIR-EIS.aspx>. Accessed: July 7, 2015.
- U.S. Fish and Wildlife Service. 2008. *Formal Endangered Species Act Consultation on the Proposed Coordinated Operations of the Central Valley Project (CVP) and State Water Project (SWP)*. Biological opinion. December. Sacramento, CA. Available: [http://www.fws.gov/sacramento/delta\\_update.htm](http://www.fws.gov/sacramento/delta_update.htm).